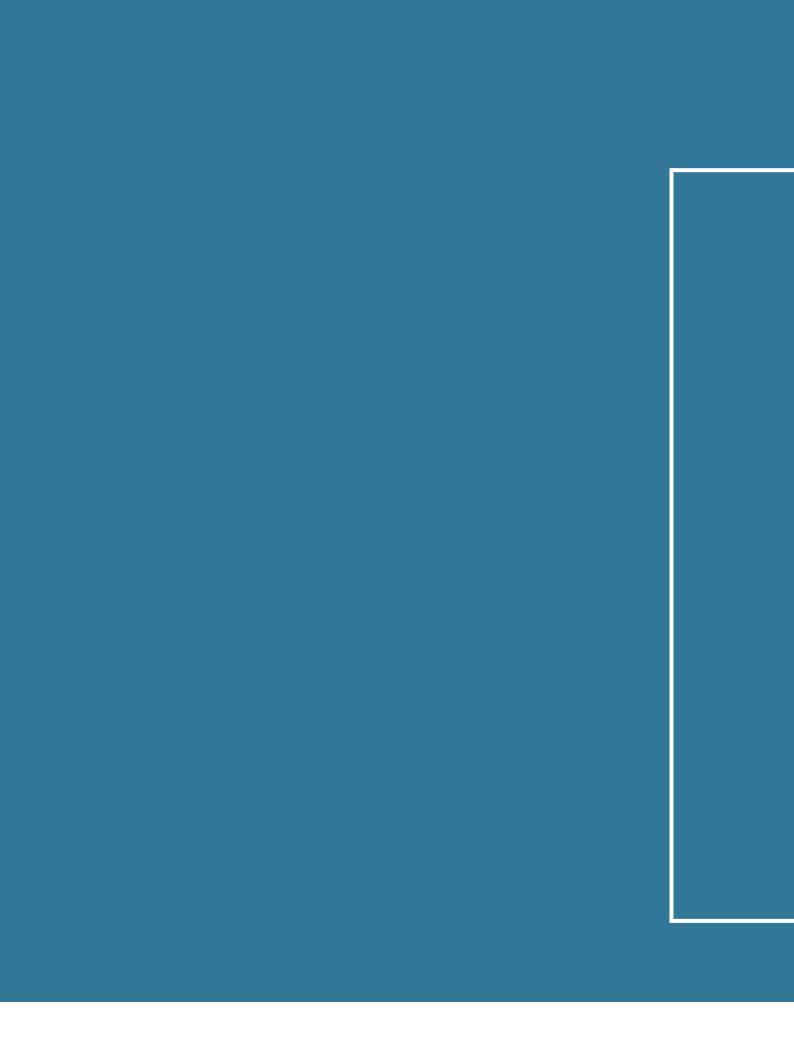
# Inaugural Chief Medical Officer (CMO)

# Strategic Plan 2022-23





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# **Executive Summary**

COVID-19 is the great "unequalizer." The racial/ethnic, class, disability, and other demographic differences in SARS-CoV-2 transmission, hospitalization, and death demonstrated the ongoing necessity of policies and practices that address the social and structural inequities shaping health care delivery and outcomes. COVID-19 is the latest crisis to validate the continued need for strategic collaboration between health care delivery partners and the New York City (NYC) Department of Health and Mental Hygiene (Health Department) for the provision of services and programming to improve the health of all New Yorkers.

COVID-19 pushed NYC's health care infrastructure to the brink: surges led to overflowing hospital capacity, revealing the fragmented and siloed nature of the City's health care delivery system and reinforcing the importance of the public safety-net facilities to caring for those hardest hit by SARS-CoV-2.¹ Among the groups who suffered disproportionately from COVID-19 were New Yorkers in low income neighborhoods who were

more likely to test positive for COVID-19 antibodies in the early months of the pandemic (May 2020) compared to residents in middle- and high- income ZIP codes;2 and Black and Latino New Yorkers, whose COVID-19 rates were 19.8/100,000 cases and 22.8/100,000 cases compared to 10.2/100,000 cases in White residents in April 2020.3 Both low-income and Black and Latino New Yorkers were more likely to utilize safetynet facilities such as public hospitals and community health centers which offer affordable health care to New Yorkers who are uninsured, from an immigrant background, or live in economically under-resourced communities.4

The pandemic also reinforced the interwoven nature of public health and health care delivery. The COVID-19 management efforts of the Health Department and health care delivery partners often had a direct impact on each other. [Health care delivery partners are defined here as those groups who provide health services to New Yorkers: These include health systems like

nonprofit hospitals, safety-net facilities, and community health centers; providers and healers such as clinicians, community health workers, and doulas; and holistic, wraparound health care services like HIVtesting centers and Overdose Prevention Centers.] For example, the issuance of masking, social distancing, and vaccine policies by the Health Department directly affected the numbers of infected and ill New Yorkers using emergency and critical care facilities in local hospitals. Thus, COVID-19 has demonstrated the need for aligned and coordinated efforts between the sectors of health care delivery and public health.5

The pandemic inspired a recommitment to overcoming health inequities, as seen in COVID-19's differential harm on groups by racial/ethnic, socioeconomic, and neighborhood differences, to name a few. In October 2021, the NYC Board of Health (BOH) passed a resolution declaring racism a public health crisis, further institutionalizing the Health Department's June 2020 declaration. The Health Department will continue its current efforts to operationalize the series of actions described in the BOH's resolution.

Introducing the New York City Health Department Chief Medical Officer (CMO): The CMO's mission is to develop and implement anti-racism policies and programs that advance health equity and accountability in partnership with Health Department divisions and health care delivery organizations. The CMO will raise the visibility of the biggest health equity challenges and will move resources to the places, spaces, and programs that address them through collaboration with neighborhood-based and citywide health care delivery organizations.

This Inaugural Chief Medical Officer (CMO) Strategic Plan, 2022-23 outlines the CMO's role and priorities. NYC Health Commissioner Dave A. Chokshi created the CMO role in 2021 to facilitate collaboration among health care delivery partners and the Health Department around a shared vision for improving health in New York City. This vision is a city where all New Yorkers can realize their full health potential, regardless of who they are, where they are from, or where they live. The creation of the CMO

role is a next step in the 2015 call to action set forth by former Commissioner Mary T. Bassett to uproot structural racism in our public health practice through internal transformation and partnership with communities grounded in equity and social justice. The CMO's mission is to develop and implement anti-racism policies and programs that advance health equity and accountability in partnership with Health Department divisions and health care delivery organizations. The CMO will raise the

visibility of the biggest health equity challenges and will move resources to the places, spaces, and programs that address them through collaboration with neighborhood-based and citywide health care delivery organizations. This work will occur in three strategic priority areas or "Domains":

- 1. Bridging Public Health and Health Care
- Advancing the Health Department's Commitment to Anti-racism in Public Health Practice and Policy
- 3. Building Institutional Accountability

The first Domain, Bridging Public Health and Health Care, outlines mechanisms to strengthen alignment and partnership between public health and health care delivery. The second Domain, Advancing the Health Department's Commitment to Anti-racism in Public Health Practice and Policy, defines types of collaborative projects the Health Department will undertake in lockstep with health care delivery partners to further health equity across New York City. Finally, the third Domain, Building Institutional Accountability, pushes accountability and transparency by the Health Department and health care delivery partners in key areas. The CMO will support and facilitate work across all three Domains.

NYC's Health Department has extensively documented racial inequities in rates of HIV, tuberculosis, maternal mortality, infant mortality, mental health conditions,

chronic disease prevalence and mortality, gun violence and other forms of physical violence, and premature mortality. In 2015. the Health Department launched Race to Justice, an initiative to reform internal policies, practices, and operations to advance racial equity and social justice across the Department. This Inaugural CMO Strategic Plan is grounded in the skills Race to Justice has implemented among staff to address racism, apply policies that lessens the impact of structural oppression, and strengthen collaborations with communities across the city to improve health outcomes for all New Yorkers.

The CMO role will champion efforts already underway within the Health Department, much of which advances equitable health care delivery across government, community, and health care partners. The Health Department undertakes a variety of activities, ranging from direct clinical services to convening partners to improve health care delivery. More broadly, one effort is the Health Department's Take Care New York plan, which aims to reduce health inequities by sharing neighborhood-specific health outcomes data, building partnerships, and leading actions focused on antiracism among key stakeholders. Similarly, another effort, the Public Health Corps, is a cadre of anti-racism health workers and programs which address place-based inequities exacerbated by COVID-19.

In addition, the CMO will work in service of health care delivery partners to facilitate collaboration between health care and community- and faith- based organizations, who often serve the same neighborhoods but who may have historically been misaligned because of the structure of payment and incentives in a fragmented health care system. Using the resources and convening role of the Health Department, the CMO will be central in fulfilling a core aim of the Health Department's 2022-26 Strategic Plan: to bridge public health and health care across five anti-racist public health focal areas. The five focal areas direct the Health Department to (1) foster transparent and accountable partnerships; (2) embed health equity in all policies; (3) change the narrative to leverage personal stories; (4) use data to spotlight social inequities; and (5) create an equitable workforce. These focal areas will bolster internal and external collaborations to allow the Health Department to be a stronger partner to all members of the health care delivery sector.

The CMO will introduce new initiatives that bridge public health and health care to address racism in care delivery. One example is the NYC Coalition to Eliminate Racism in Clinical Algorithms (CERCA), the first of its kind nationwide. Launched in November 2021, NYC CERCA is a coalition of health care organizations, convened by the CMO, who are committed to removing inappropriate race adjustment from clinical algorithms, measuring the impact

on racial health inequities, and engaging patients whose care was influenced by this harmful practice. By raising consciousness amongst providers about how the history of racism in medicine shapes clinical algorithms and ensuring accountability to reduce racial inequities in care, this coalition will advance racial justice in health care across NYC.

As one of the oldest and largest public health institutions in the United States, the NYC Health Department has a history of innovative, forward-thinking approaches to improving health and well-being. New York City has a large, complex health care delivery landscape, and the intersection with public health is critical in a city of almost nine million people. Too often, efforts toward equitable care focus only on patient-level or interpersonal drivers of health inequities rather than on dismantling the systems and policies causing the health care delivery sector to perpetuate racist care delivery. By institutionalizing the CMO role, the Health Department can forge strong connections with health care delivery partners toward an anti-racist agenda which will serve as a call-to-action for other health care partners around the country and world.

# Introduction

The COVID-19 pandemic has made an everlasting impact on New York City (NYC). With over 34,000 lives lost to date,7,8 NYC was one of the first U.S. cities to experience the disparate impact COVID-19 had on groups by race and ethnicity, socioeconomic status, neighborhood of residence, and other social realities. During the same period, protests against police brutality began in mass following the murders of Ahmaud Arbery, Breonna Taylor, and George Floyd. Against this backdrop, the Health Department continued its efforts to address the structural racism and inequities driving premature mortality and unequal health outcomes in NYC. The combination of a once-in-a-century pandemic with a reinvigorated social movement for racial justice has created the conditions for meaningful social and structural change, and the NYC Health Department intends to play a central role.

The Health Department has a long history of addressing the conditions that create inequitable health outcomes, including racism, poverty, ageism,

and neighborhood disinvestment and underinvestment. Externally, many programs have worked for decades to address social determinants of health, such as Shop Healthy, which works with food retailers and suppliers to increase access to healthy foods.<sup>9</sup>

Internally, the Health Department's Race to Justice initiative has worked since 2015 to help staff learn what they can do to better address racial health gaps and improve health outcomes for all New Yorkers. This initiative applies a multi-prong education and capacity building approach in support of one of the Health Department's key strategies-- Implementing Anti-Racism in Public Health Practice.<sup>10</sup>

**Table 1: Key Health Care Terminology** 

Health Care Delivery Partners	Health care delivery partners are defined here as those groups who provide health services to New Yorkers: these include health systems like nonprofit hospitals, safety-net facilities, and community health centers; providers and healers such as clinicians, community health workers, and doulas; and holistic, wraparound health care services like HIV-testing centers and Overdose Prevention Centers.
Integrated Delivery Network	A legally structured alliance among hospitals, physicians, and health care providers (such as imaging centers, laboratories, physical therapy) that provides all health care services to a defined population of patients under one health system brand. (Source: Legal Insider)
Safety Net Facilities	Those providers and systems (e.g., outpatient clinics, hospitals) that organize and deliver a significant level of health care and other related services to uninsured, Medicaid, and other historically under-resourced populations. (Source: Institute of Medicine)

# **COVID-19 as Harbinger: Bridging a Fragmented Health Care Delivery System**

The COVID-19 pandemic laid bare the fractured nature of the health care delivery system in New York City, as it did in many cities around the U.S. and world.<sup>11</sup> When the pandemic challenged health systems' capacity to provide adequate personal protective equipment for their staff, health systems developed an individualized plan to procure supplies, sometimes in direct competition with each other for purchases.<sup>12</sup> NYC's safetynet hospitals, the largest in the nation,

cared for many of those most severely impacted by COVID-19; one study of mortality trends during ICU surges across 11 public hospitals from March to May 2020 showed higher mortality rates during surges, particularly for Hispanic and Black patients, demonstrating the need for integrated care delivery across all hospital systems — public and private combined contributing their fair share — in order to avoid significant inequities in future situations that strain the system.<sup>13</sup>

As much as COVID-19 demonstrated the fragmentation in health care delivery, the pandemic also highlighted the chronic disinvestment within public health departments. In many cities, including NYC, decades of underinvestment revealed limited workforce, funding, and data infrastructure required for convening and managing widescale pandemic response efforts across multiple sectors.14 In short, the current U.S. health care system is not designed for health care delivery partners to work in unison but in competition for patients, resources, and supplies. In a city like NYC with some of the most highly specialized and well-resourced health systems in the world, this competition is particularly pointed. Similarly, the local public health infrastructure has been further strained by COVID-19.

The NYC Health Department's CMO role is an opportunity to convene health care delivery, public health, and community

partners to move NYC forward during and after COVID-19 recovery and to continue the Health Department's commitment to equitable health care for all New Yorkers. The CMO's bridging function is central to the Health Department's future strategy, and is in keeping with a national approach—outlined in the Public Health 3.0 plan from the Department of Health and Human Services-which encourages local health municipalities to focus on health equity by working closely with health and non-health sectors.15 We define bridging public health and health care in accordance with Taylor et al. as "aligning efforts and priorities of clinical health care practice, health care payments and incentives, and public health authorities...to embrace more holistic approaches to keep communities healthy, while improving understanding of population health needs for public health practitioners."16 NYC's Health Department has taken on this mandate to serve as such a bridge through the CMO role.

# **Urgency of Now: A Need to Focus on Health Equity with a Broad Coalition**

COVID-19 is only the latest disease state to highlight inequities within the health care delivery system.<sup>17</sup> In New York City alone, inequities by race and ethnicity exist for HIV, maternal and infant mortality, and chronic disease health outcomes, with Black and Latino patients experiencing disproportionate impact.<sup>18,19,20</sup> This reality is a reflection of national trends across

the United States and global trends differentiating the Global North from the Global South. A seminal report from the National Academy of Medicine found that Black and Latino patients received less life-saving diagnostic and interventional procedures than White Americans, and overall poorer quality of care.<sup>21</sup> These differences persisted even when statistical

adjustments were made for insurance status, socioeconomic status, severity of disease, and type of health care facility utilized.

Against this historic backdrop of systemic inequities in health care delivery by race and ethnicity, NYC's Health Commissioner, Dr. Dave A. Chokshi, created the CMO role to ensure the success of the Health Department's partnerships with health care delivery partners and to pursue anti-racist policies and practices that address the root causes of health inequities. This role is predicated on the belief that a strong relationship between the Health Department and key health care delivery partners (see Box 1) will provide the collaborative platform needed to move anti-racism initiatives forward in NYC.

Among health care delivery partners, this Strategic Plan is targeted to a diverse group of health care workers. For Integrated Delivery Networks (IDNs; see Table 1), safety net facilities and community health centers, the CMO will work with leadership in the C-Suite (e.g., Chief Population Health Officers, Chief Nursing Officers, Chief Medical Officers, Board Members, etc.) and in quality, population health, and health equity because of the central role these individuals play in how health care is delivered in NYC. The CMO will also work with a wide array of health care providers, broadly defined here to

# Box 1: Primary Audience Among Health Care Delivery Partners

- Integrated Delivery Networks
- · Safety-Net Facilities
- Community Health Centers
   (e.g., Federally Qualified Health Centers)
- Community- and Faith-Based Organizations
- Providers (e.g., physicians, nurses)
- Healers (e.g., doulas, health coaches)
- Insurers

include clinicians (community-, health system-, and independent practice-based clinicians) and healers such as doulas and community health workers; this group is vital because of their closeness to health care delivery for populations experiencing historic and contemporary oppression.

In addition, community- and faithbased organizations are an essential audience, considering their place-based expertise and profound knowledge of community needs, priorities, and challenges to accessing equitable and racially just health care. Finally, insurers are a critical audience due to their central role in aligning payment incentives and structures with equitable programing and outcomes. While not targeted in the CMO's efforts currently, a key group of collaborators who will be consulted and informed of progress are professional, advocacy, and philanthropic health care organizations because of their investment in and support of the health care delivery partners listed above.

# Table 2: Common Health Equity Terms (See Appendix A for Race to Justice Glossary for full definitions.)

Health Equity	The attainment of the highest level of health for all people.  Additionally, no one is disadvantaged from attaining the highest level of health "because of social position or other socially determined circumstances." (Source: Adapted from Healthy People 2020 and CDC.)
Racism	A system of power and oppression that structures opportunities and assigns value based on race and ethnicity, unfairly disadvantaging people of color, while unfairly advantaging Whites. (Sources: Adapted from C. Jones & People's Institute.)
Anti-racism	Anti-racism is defined as actively identifying and opposing racism by changing the policies, institutions, and structures that disproportionately favors some racial groups while disadvantaging others. (Source: Adapted from I. Kendi, How To Be An Antiracist.)
Social Justice	The equitable distribution of goods, resources, and opportunities, informed by inclusive participation of all people in social decision making. (Source: Adapted from National Association of County and City Health Officials)

# Seminal Declarations: Reducing Health Inequities Through a Commitment to Anti-racism

The CMO's focus on anti-racism comes at a time when public health institutions across the United States are coming to terms with how to address and undo the historic impact of structural racism on all aspects of life, and in health care, on care delivery. [We define anti-racism here as actively identifying and opposing racism by changing the policies, institutions, and structures that disproportionately favors some racial groups while disadvantaging others- see Table 2].22 In 2018, the Wisconsin Public Health Association (WPHA) became the first entity to declare racism a public health crisis in its Racial Equity Resolution, which stated that the WPHA "asserts that racism is a public health crisis affecting our entire society."23 By all accounts, Wisconsin was also the first state in which local governments formally acknowledged racism as a public health emergency, starting with Milwaukee County in 2019.24 Per the County Ordinance 20-4, signed officially in 2020, "Milwaukee County government declares that.... Racism has been, is, and will continue to be, a public health crisis until race is no longer a predictor of quality or length of life in Milwaukee County."25

Since then, more than 200 public health departments and governing entities have issued similar declarations.<sup>26</sup> After the murder of George Floyd in May 2020, the American Academy of Emergency Medicine (AAEM) and Society for Academic Emergency Medicine (SAEM) released a joint statement in which they noted: "Unfortunately, as emergency physicians, we also know all too well that racism is a public health crisis and a national plague."27 The American Medical Association's (AMA) Board of Trustees, in a virtual special meeting of the AMA House of Delegates in June 2020, issued a statement asserting that "racism in its systemic, structural, institutional, and interpersonal forms is an urgent threat to public health, the advancement of health equity, and a barrier to excellence in the delivery of medical care."28 That same month, in a letter to the Director of the Domestic Policy Council, the American Academy of Family Physicians (AAFP) urged, "It is time for the United States to officially recognize racism as a public health issue and declare a public health emergency to address the negative impacts racism is having on the physical and mental wellbeing [sic] of millions of people."29

Figure 1: Professional Groups With Anti-Racism Statements













Shortly thereafter, the United States
Senate formally declared racism a public health crisis in S. Resolution 655 of the 116th Congress.<sup>30</sup> Of note, groups like the American Academy of Pediatrics had already issued its declaration of racism as a public health crisis in the prior year in 2019, well before the collective statements were released.<sup>31</sup>

In 2021, additional government entities followed suit. On April 8, Centers for Disease Control and Prevention (CDC) Director Rochelle P. Walensky released a statement declaring, "... The pandemic illuminated inequities that have existed for generations and

revealed for all of America a known, but often unaddressed, epidemic impacting public health: racism. What we know is this: racism is a serious public health threat that directly affects the well-being of millions of Americans. As a result, it affects the health of our entire nation."32 According to a report by the American Public Health Association (APHA), as of October 2021, 198 declarations with publicly available copies had been passed across 37 U.S. states, with California, Ohio, and Connecticut issuing the most declarations. Additionally, per the analysis, most declarations were concentrated in the Western and Midwestern regions of the United States.33

In New York State, Senator Kevin S. Parker introduced a bill to declare racism a public health crisis on January 26, 2021. Senate Bill 2987A passed the New York State Senate in May and by the Assembly in June and reads: "The legislature hereby finds and declares that racism is a public health crisis that poses a threat to the health, safety, and quality of life to as many as forty-seven million Americans; and that racism negatively impacts and exacerbates health inequities among historically marginalized communities."34 Furthermore, the bill established a working group to promote racial equity throughout the state. On a city level, the NYC Health Department first declared

that "racism is a public health crisis" on June 8, 2020.<sup>35</sup>

On October 18, 2021, the NYC Board of Health passed a landmark resolution declaring racism a public health crisis. The resolution acknowledges antiracism work done to date and names several actions from the NYC Health Department going forward, including a semi-annual report detailing progress.<sup>36</sup> Declaration such as those detailed above are important because public acknowledgment, especially with clearly outline actions, is critical for progress to be made and for community healing, reconciliation and restoration.

# **Building a Path Forward: Addressing Structural Racism with a Focus on Healing and Growth**

Declaring racism a public health crisis is only the beginning to addressing structural drivers of health inequities. Identifying where change must occur is paramount to improving health care delivery for historically marginalized racial and ethnic groups. Often, patientlevel factors such as adherence to appointments or taking medications are chosen as focus areas for health care improvement. Next, care process factors--the interpersonal relations between patients and providers--are targeted, leading to widescale trainings on implicit bias for the health care workforce. While patient- and care- level interventions are needed to drive improvements in

health inequities, more attention should be placed on institutional or health care delivery policies that contribute to differential health outcomes by race and ethnicity.

It is often easier to address patient-level or interpersonal drivers of health inequities than it is to dismantle the systems and policies causing the health care delivery sector to perpetuate racist care delivery. Yet examples exist of programs that bridge public health and health care which appropriately target structural-level causes of inequities. Texas offers one such instance of the focus on structural changes. Harris County's

Public Health Living Matters program created a strategic health equity plan to address obesity. Instead of a patient- or interpersonal-level focus, this plan 1) addressed structural drivers of obesity such as poor access to healthy foods and environment impediments to walkability and physical activity, and 2) increased civic engagement to allow neighborhoods to continuously advocate for healthier local environments.<sup>37</sup> This program was successful in focusing on structural drivers of obesity because it brought both health care delivery partners and public health together.

Similarly, the CMO will work with health care delivery partners to focus on addressing the root causes that drive health inequities, in addition to patient and care level factors. The CMO will do so with an awareness of the history that impacts communities of color, a legacy that requires an acknowledgement of the historic harm of medical racism in the United States. Mistreatment of Black, Indigenous and people of color populations in the United States, compounded with everyday racism and discrimination has taken a toll on many individuals' faith in institutions.38 As a recent example of this reality, the slowed rates of vaccine uptake among communities of color has been tied to high levels of perceived mistrust in the health care system.<sup>39</sup> For example, one vaccine study found that in addition to reporting high medical mistrust compared to White participants, Black participants

also reported being less likely to join COVID-19 vaccine trials.<sup>40</sup> This reluctance is further demonstrated in NYC where only 55% of Black New Yorkers are vaccinated with at least one COVID-19 vaccine dose compared to a 78.4% citywide average, as of December 2021. The work of healing this historic mistrust requires communication and transparency and is part of the effort that CMO will undertake in her brokering of the relationship between health care and public health.

In addition, the CMO's mission and work will not be authentic and successful without an acknowledgement that the Health Department itself has sometimes fallen short in its partnerships with health care delivery partners. Community- or faith-based organizations, in particular, may have felt that there are iterations of programing from the Health Department which have not always met their local needs or been sustainably maintained. For example, community- and faithbased organizations are not funded or sustained with the same investment as health care systems, resulting in decades of fragmented programming and engagement. The Health Department acknowledges the critical role that these organizations play while recognizing that these partners have been clear in their critiques of inequitable funding and, oftentimes, misaligned priorities.41

It is with this history of distrust and strained relationships in mind that the CMO commits to building strategy with a growth mindset.<sup>42</sup> A growth mindset simultaneously praises and rewards efforts towards achieving a goal, while viewing failures or setbacks not as deterrents but as guideposts for improvement. The CMO acknowledges that the work of achieving health equity is iterative and will require humility and patience from all collaborators to be successful.

# **Chief Medical Officer Role**

Created in 2021, the NYC Health
Department's Chief Medical Officer
(CMO) will lead the Health Department's
vision and strategy to bridge public health
and health care, grow the agency's antiracism health policies and practices,
and increase institutional accountability
around implementing health equity

strategies. Dr. Michelle Morse is the inaugural CMO and has been charged with defining the role and implementing structures for successful collaboration both within the Health Department and externally across multiple health care delivery partners. (See Appendix B for Dr. Morse's biography.)

### **SPOTLIGHT:**

The Atlanta Chief Health Officer (CHO) role is one example of a role similar to the NYC Health Department's CMO role. In 2019, Mayor Keisha Lance Bottoms appointed Dr. Angelica Ferguson to serve as Atlanta's first CHO. The CHO focuses on addressing the causes that lead to illness and disability, specifically around HIV transmission, asthma, diabetes and other chronic illnesses. Similar to the NYC CMO role, the Atlanta CHO serves as a bridge between the mayor's office and key community partners and local hospitals. This bridging function was vital in identifying which disease states to prioritize; once identified for prioritization, Dr. Ferguson ensured key stakeholders aligned efforts to address shared goals. Dr. Ferguson's role was seminal to Atlanta's initial efforts to collaborate across multiple health care sectors in the early days of managing COVID-19 in 2020.

Dr. Morse concurrently holds the role of Deputy Commissioner for the Center for Health Equity and Community Wellness (CHECW). CHECW seeks to eliminate racial and other inequities resulting in premature mortality. This Division addresses inequity across community and health care systems in partnership with community, faith-based, and health care organizations. In her dual capacity, the CMO will partner with CHECW staff who have the rich community and health care delivery relationships essential to bridge public health and health care. The close alignment of the CMO role with CHECW allows for citywide impact through CHECW's expansive portfolio and leverages the work of the entire Health Department.

The close alliance with CHECW allows the CMO to fulfill a role as a convener of internal (Health Department) and external (health care delivery partners) collaborators. Externally, the CMO's will focus on bridging public health and health care, two sectors that while synergistic, are not always aligned in their priorities, policies, and programs. On the one hand, health care delivery partners, like health systems, may focus on immediate care delivery issues within the inpatient and outpatient settings; populationhealth level goals, such as investment in preventative care or addressing social determinants of health, have only recently received more attention. In contrast, public health addresses the wide array of upstream conditions that impact the

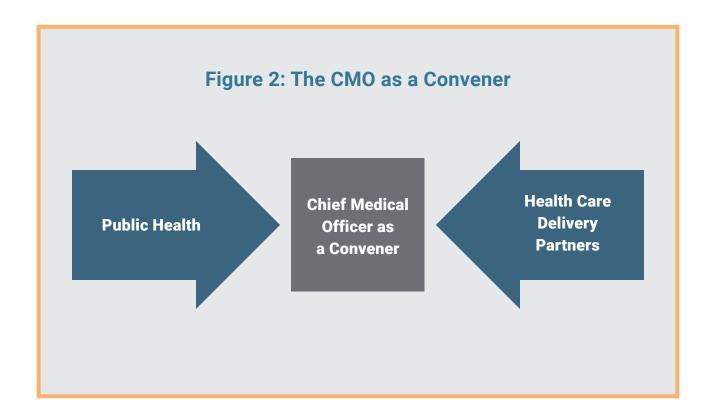
health of populations such as air quality, education, and access to healthy living environments. The CMO will broker close relationships between leadership within health care delivery partners and the Health Department around a common aim of pursuing an agenda for equitable care delivery.

Internally the CMO will align the work of the Health Department's eleven Divisions. At present, Health Department Divisions that deliver health care services around interventions like HIV management. reducing maternal mortality, or preventing opioid deaths work directly with staff from the various health care delivery systems. This has led to each health care delivery system having multiple points of contact with the Health Department. Furthermore, the C-suite leadership who are often responsible for expediting and approving health systems' involvement in external initiatives may not be engaged by each individual Division. The CMO will serve as an internal convener among the various Health Department Divisions, and will broker requests around their varied initiatives to health care delivery partners' leadership, allowing for more streamlined, coordinated and efficient collaborations.

"There is a natural nexus between public health and health care delivery that is something we need to continue building on; we must tear down the walls between those two worlds so that we can achieve the common cause of promoting health. Health equity is central to this goal because inequity and illness are inherently intertwined, and therefore improving health requires redressing inequities.

In NYC, the Chief Medical Officer role will help us effectively align public health and health care delivery to promote the achievement of optimal health for all New Yorkers."

-Dr. Dave A. Chokshi, NYC Health Commissioner



The CMO is one of several positions within the Health Department focused on health equity. Distinct but synergistic with the CMO role is the Chief Equity Officer, who is also focused on executing the actions identified in the Board of Health's declaration of racism as a public health crisis (Box 2). In this role, the Chief Equity Officer drives internal Health Department anti-racism initiatives such

as Race to Justice and forms strong ties with external partners like City agencies around addressing social determinants of health drivers. <sup>43</sup> The CMO will work closely with the Chief Equity Officer, however her focus will be on engaging internal and external health care delivery partners around achieving key anti-racism goals.

## **Box 2: Chief Equity Officer and Race to Justice**

In 2021, the Health Department appointed its first Chief Equity Officer aligned with the role of First Deputy Commissioner. The Office of the First Deputy Commissioner/Chief Equity Officer (FDCCEO) manages internal and external efforts to reform our agency and prioritize health issues with a racial equity lens. FDCCEO works to advance the agency's mission to achieve equitable health outcomes, and works collaboratively to operationalize equitable systems, policies, strategies, and practices.

### **Race to Justice**

Race to Justice was established in 2015, the goal was to develop an initiative that would reform the NYC Health Department's policies and practices to improve how we do work and advance racial equity.

- Normalize: The goal of normalize is to build a shared analysis among staff and
  generate energy among stakeholders to operate with urgency. This element of the
  model is typically marked by training and conversations about the history, legacy and
  impact of racism and strategies to address racial inequity.
- Organize: Organize strategies build internal infrastructure to create change by
  organizing staff and developing their leadership to plan and implement change
  efforts, in addition to partnering with other institutions to eliminate the roots of
  structural racism and maximize impact.
- Operationalize: Operationalize strategies build capacity to achieve equity by using tools and data to guide and inform the development of policies, practices and programs to break the cycles of inequities

As the nation and NYC continue to manage COVID-19, there is temptation to return to "business as usual." However, doing so would disregard the need elevated during COVID-19 for strong

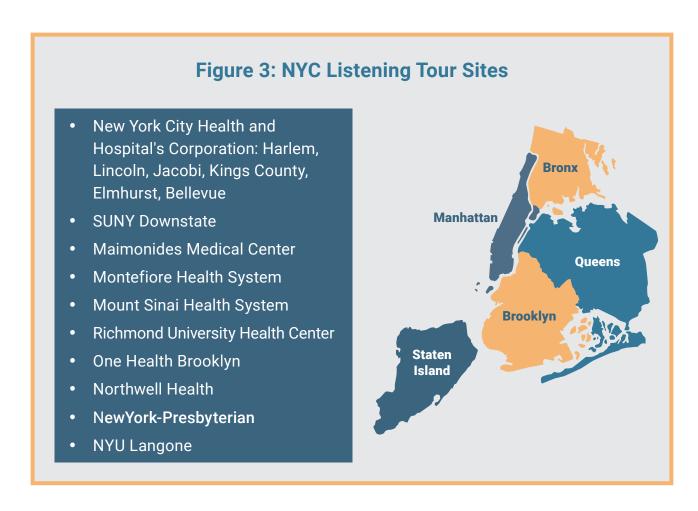
public-private, multi-sectoral partnerships focused on health equity. The CMO role will help fulfill this need and will prepare NYC to meet the challenges of the next century.

# Methodology

The CMO Strategic Plan builds on feedback and lessons gleaned from virtual and in-person listening tour meetings with leaders across NYC's nonprofit and public integrated delivery networks (IDNs), hospitals, safety-net facilities, and health centers. The Plan was also informed by internal Health Department discussions with staff and leadership involved in bridging public health and health care and in conversations with external health equity subject-matter experts. Because of a desire to learn from other health departments facing similar challenges, the CMO's team conducted a national environmental scan of representative examples demonstrating collaboratives between public health, health care, and community partners. Finally, the Plan drew from various theoretical frameworks, including public health critical race praxis, the biopsychosocial effects of racism, and critical race theory.44,45,46

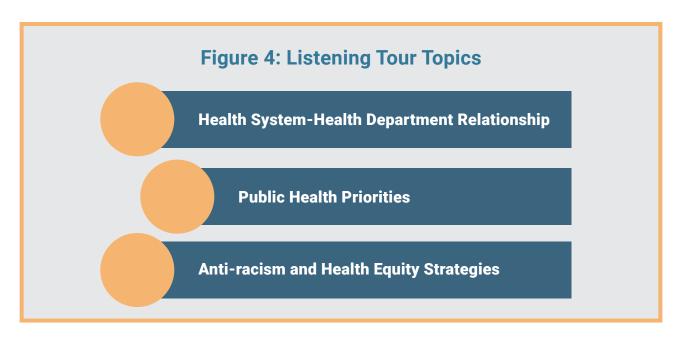
### **NYC Listening Tour**

The CMO's Listening Tour began in June 2021 and included 14 health care delivery partners across NYC. Dr. Morse and team met with leaders from various hospital service lines, including quality, population health, and health equity leadership. In this initial phase, the CMO purposefully engaged several of New York's large IDNs around creating a shared vision for equitable care delivery. Community health centers (such as federally qualified health centers [FQHCs]) are represented in the Health Department's current programmatic efforts, such as with the Public Health Corps, the citywide vaccination campaign, and through longstanding collaborations such as NYC REACH.47 However, a deeper understanding of their priorities and needs is important and will be prioritized in ongoing engagement with health care delivery partners. In future phases of this Listening Tour, the CMO will engage with independent health care practitioners, community health centers, insurers, healers such as doulas and alternative medicine providers, and vital ancillary services such as home health centers and visiting nursing agencies.



The aim of the Listening Tour was to acquaint the new CMO with health system leadership and draw from examples of successful partnerships with the Health Department. All interviewed sites shared current efforts to embed health equity

and anti-racist themes into their strategic planning around care delivery. Finally, all sites offered examples of areas for potential collaboration with the CMO. (See Appendix C for listening tour questions.)



### **National Environmental Scan**

The CMO's team conducted an extensive literature review to identify examples of public health and health system partnerships across the U.S. The team identified initiatives across seven individual states starting from the 2010s. These examples included service-based and county-level initiatives and strategic plans with public health, community- and faith- based organizations, and health care systems around management of individual disease states and/or rollout of health equity-based programming. All examples utilized a framework of tying health outcomes to upstream social determinant of health causes. Throughout this Strategic Plan, examples from the environmental scan are presented as boxed "Spotlights," and a comprehensive review is offered in Appendix D.

# Internal and External Subject Matter Expert Input

The CMO's Strategic Plan is informed by input from internal and external subjectmatter experts. Given their leadership over fundamental workstreams and close proximity to community- and faithbased based initiatives, more than a dozen NYC Health Department experts reviewed and contributed to the content of the plan over a two-month period. Their backgrounds as researchers, policy analysts, administrators, and clinicians working in governmental agencies and health centers make them a rich source of input and expertise. The CMO also consulted three external subject-matter health equity experts with experience in creating national and institutional health equity strategic plans. Collectively, these external experts have over 65 years of experience and have worked at local and state health departments, for large professional medical organizations, and for health systems.

### **Theoretical Frameworks**

Several theoretical frameworks inform this document. Three are described here and in more detail in Appendix E.

### **Table 3: Theoretical Frameworks**

# Critical Race Theory

Racism is embedded in society, serves the material and psychic needs of the dominant (White) group, is intersectional in its impact, and is founded on the socially constructed notion of race.48 Therefore, Critical Race Theory (CRT) argues for a radical transformation of current systems to eradicate, not simply acknowledge, racism.<sup>49</sup> Specifically, the three primary objectives of CRT include: 1) to present stories about discrimination from the perspective of people of color; 2) to espouse the eradication of racial subjugation while acknowledging race as a social construct; and 3) to address matters affecting other social categories, such as sexuality and class (intersectionality).50 The core tenets of CRT that can be applied to population health research include a) dominant cultural orientation discrimination; b) race and ethnic relations approaches; c) narrative as inquiry; d) contextual and historicized analysis; and e) investigator relationship to research and the scholarly voice.51

# Public Health Critical Race Praxis

Founded as a methodology to implement Critical Race Theory in practice, the Public Health Critical Race Praxis is a semi-structured research framework that centers racial equity using methodological rigor which combines theory, experiential knowledge, science, and action to address inequities.<sup>52</sup> The four tenets of this research are:

- Focus 1: Contemporary Patterns of Racial Relations (Describe key characteristics of societal racialization for the study's time period)
- Focus 2: Knowledge Production (Identify disciplinary norms or other considerations that may inadvertently bias understandings derived from the research)
- Focus 3: Conceptualization and Measurement (Decide how to operationalize key concepts while accounting for the implications raised in Focus 2)
- Focus 4: Action (Use knowledge gained to determine whether actions can be taken to help counter racial inequities)

# **Table 3: Theoretical Frameworks (continued)**

Biopsychosocial Effects of Racism Building on research that demonstrates the deleterious effects of stress on various health-related outcomes, numerous studies are also demonstrating perceived racism as a significant biopsychosocial stressor contributing to poor outcomes in racial and ethnic minority groups. As noted by Kaholokula et al., racism "is a chronic social stressor defined as the beliefs, acts, and institutional measures that devalue people because of their phenotype or racial and ethnic affiliation." Individual and institutional racism directly affects health in numerous ways, including by limiting socioeconomic opportunities and mobility; subjecting Black, Latino, Indigenous, and people of color groups to racial bias in medical care; and increasing psychological burden associated with stigma and perceived inferiority. 54

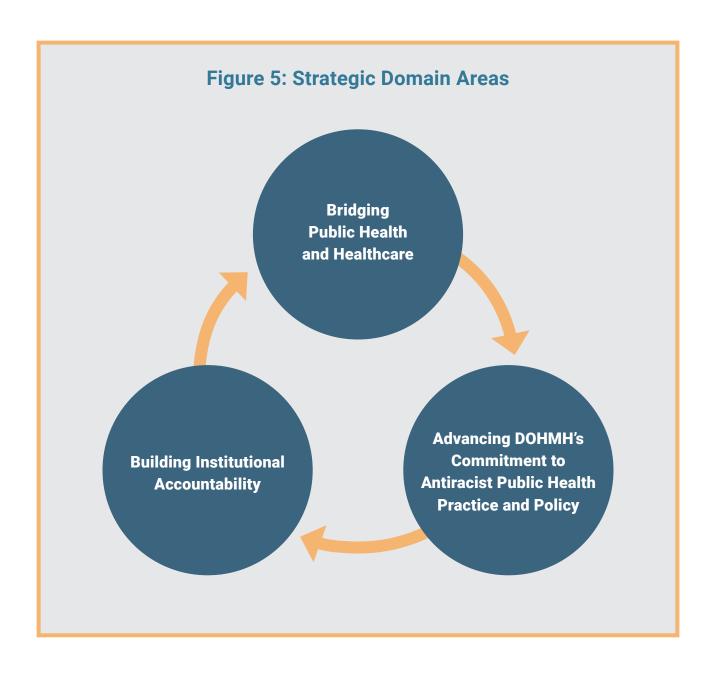
# Strategic Priorities: Domains

The Health Department has several existing programs that bridge public health and health care. The CMO will champion and shepherd current efforts and will support expansion when opportune. This strategic plan describes priorities - noted here as "Domains" - which will strengthen the Health Department's health equity focus, ensure success of place-based strategies, and influence resource allocation to advance these goals. Each Domain describes the current and future body of work that fulfills its aims. Domains also outline the associated set of activities the CMO will undertake with health care delivery partners.

Across current and new areas of work, the CMO will work as a translator, convener and facilitator to support alignment of health care delivery partners around shared priorities.

### **Domains**

- Domain 1: Bridging Public Health and Health Care
- Domain 2: Advancing the Health Department's Commitment to Anti-racism in Public Health Practice and Policy
- Domain 3: Building Institutional Accountability



The first Domain, Bridging Public Health and Health Care, outlines mechanisms to strengthen alignment and partnership between public health and health care delivery. The second Domain, Advancing the Health Department's Commitment to Anti-racism in Public Health Practice and Policy, defines the kinds of collaborative projects that the Health Department will undertake in lockstep with health systems to progress anti-racist health equity efforts across New York City. Finally,

the third Domain, Building Institutional Accountability, ensures accountability and transparency around progress in key health equity areas.

The Domains are closely intertwined.
By strengthening relationships between the Health Department and health care delivery sector (Domain 1), the CMO can facilitate connections across partners that advances the implementation of anti-racism practice in care delivery

(Domain 2). The CMO will concurrently advocate for city, state, and federal policies that direct resources and support to on-the-ground anti-racism initiatives implemented by health care delivery partners. Finally, to ensure consistent forward progress, Domain 3 outlines mechanisms to build transparency and accountability; this reinforcement will strengthen the connectivity between

public health and the health care delivery partners to collaborate on future efforts.

Each Domain includes input from the Listening Tour with health care delivery partners and Health Department staff that supported the creation of the Domain. In addition, examples of similar work at other public health institutions are included to illustrate the possibilities of the CMO role.

## **Domain 1: Bridging Public Health and Health Care**

To strengthen the partnership between the Health Department and health care delivery partners, the CMO will support and lead a series of activities that align the needs of communities with the health equity priorities of the Health Department and health care delivery sector. For example, the Health Department can support connections between health care delivery partners and local community- and faith-based organizations by encouraging health care delivery partners to engage with local governance agencies such as Community Boards and establishing regular touchpoints with key community leaders.55

The CMO's bridging function comes from a rich history of multi-sector alignment in previous Health Department efforts. In 1921 after World War I, the New York Chapter of the Red Cross and NYC Health Department created the East Harlem District Health Center as an initiative to demonstrate how public health could work with "voluntary health"

(health care delivery organizations) and "welfare service" (social service agencies and community-based organizations) partners. 56 This District Health Center model would serve as the prototype for future neighborhood-based health collaboratives. In 2003, then-Deputy Commissioner Mary T. Bassett established District Public Health Offices in the South Bronx, East and Central Harlem, and North and Central Brooklyn, neighborhoods with disproportionate burdens of premature mortality.<sup>57</sup> In 2016– 2017, under Commissioner Bassett, the NYC Health Department launched three Neighborhood Health Action Centers (Action Centers), situated within CHECW, which use a place-based approach in their programming. The Action Centers provide a variety of services, including referrals to neighborhood resources; health and wellness classes, workshops, and activities; and community space for individuals and groups to organize and plan around community health.58

### **SPOTLIGHT:**

The Richmond City Health Department (RCHD) is an example of a successful health sector—public health partnership. The RCHD collaborated with its Housing Authority to establish community resource centers in vacant buildings in several housing communities. By converting these once-vacant residencies to medical clinics, the RCHD was able to partner with health care delivery centers to offer family planning and chronic disease management services. The project also featured an investment in community personnel by hiring local community members as health coaches and peer educators. This is an example of a public health body using its reach to create new clinical delivery models within neighborhoods in collaboration with municipal agencies (Housing Authority and RCHD), health care delivery partners, and community members.

### **Listening Tour Toplines for Domain 1:**

All health systems interviewed on the Listening Tour unanimously endorsed the need for the CMO to serve as a convener. Most health systems have a baseline relationship with the Health Department, but many noted that they have worked with the Health Department historically around crisis management—such as Ebola or hurricane preparedness—and often at a programmatic level rather than with the Department as a whole. All systems agreed that the convening and bridging functions of the CMO role were needed to strengthen the interface between their systems and the Health Department. Furthermore, many systems expressed a desire to learn more about what other health institutions in NYC were doing around population health, racial equity work and beyond, especially welcoming the sharing of best practices to inform internal efforts. While about half of the interviewed health systems said they have

some relationships with local community organizations, almost all health systems welcomed deeper connections to their local communities and looked to the CMO and Health Department to help facilitate these associations.

# **Current Activities Domain 1:**

Program	Description	Health Sector Representation
Public Health Corps (CHECW)	The Public Health Corps (PHC) is a cadre of anti-racist public health workers and programs working to address place-based inequities exacerbated by COVID-19. The PHC includes community- and faith-based organizations and community health centers employing community health workers to address health and social service issues using a social change approach. PHC partners share insights with the Health Department on neighborhood health priorities affecting their local community's health outcomes, such as food insecurity or violence prevention efforts; using this information, the Health Department may pursue programming and policies that address the community's needs.	Health Sector: FQHCs, Community and faith- based organizations
Hospital Based Violence Intervention Program (Mayor's Office of Criminal Justice and CHECW)	Supported by the Mayor's Office of Criminal Justice, this program invests in hospitals and community- and faith- based organizations to engage violently injured patients at their bedside and provide them with traumainformed care, conflict mediation services, and safety planning aimed at decreasing rates of retaliatory violence and reinjury. Its success has seen it grow from four to ten hospital partners, with plans for further expansion.	Health Sector: Hospitals caring for survivors of violence

# **Current Activities Domain 1: (continued)**

Program	Description	Health Sector Representation
Health System Preparedness Program (Office of Emergency Preparedness)	The Health Department helps health care providers across the city respond safely and effectively to emergencies through the following activities:  1. Promote collaboration between health care providers and public health stakeholders to prioritize and address emergency preparedness and response gaps  2. Ensure all health care facilities have the necessary tools and resources to care for patients and residents during an emergency event; and,  3. Support the NYC health care system's ability to meet acute health and medical needs during and after emergencies  As part of this work, the Health System Preparedness Program convenes coalitions that bring together leadership from the City's health care coalitions and facilitates interactions between acute, long-term and ambulatory care partners to build relationships and awareness of planning assumptions. These interactions help identify opportunities for collaboration and improves overall emergency management capacity for the entire NYC health care system.	Health Sector: Integrated Delivery Networks (IDNs)

# **Current Activities Domain 1: (continued)**

Program	Description	Health Sector Representation
Take Care New York (Office of the First Deputy Commissioner and Chief Equity Officer)	Take Care New York is the City's comprehensive health equity agenda. It lays out plans and priorities to advance anti-racism public health practice, reduce health inequities, and strengthen the City's collective approach to ensuring that all New Yorkers can realize their full health potential, regardless of who they are, where they are from, or where they live. It shares data, builds partnerships, and catalyzes action among stakeholders within and beyond the New York City Department of Health and Mental Hygiene.	Health Sector: IDNs and FQHCs
Doula Workforce (CHECW)	By investing in growing the numbers of doulas available to birthing parents, the Health Department's Doula programs aim to fill the supportive gap that has led to worse maternal and infant health outcomes for Black and Latino populations. To address inequities in birthing outcomes, the Health Department has funded community organizations that pair doulas to birthing parents of color and has advocated for doula-friendly policies within health systems.	Health Sector: Doulas assisting deliveries at birthing centers such as IDNs

# **Current Activities Domain 1: (continued)**

Program	Description	Health Sector Representation
HIV Care Continuum Dashboards (Division of Disease Control)	The HIV Care Continuum Dashboards (HIV CCDs) are an example of the bridge between providers within the community and the Health Department's Division of Disease Control.  The HIV CCDs use Health Department HIV surveillance data to produce facility-level reports showing the performance of providers who give HIV care to the majority of New Yorkers with HIV. The CCDs, sent via email to over 60 community HIV providers twice per year, contain information on how quickly New Yorkers newly diagnosed with HIV are linked to care and how well their HIV viral load is controlled. CCD data on viral load suppression by facility are also published annually on the Health Department's website to ensure that information is shared widely and openly with the provider community and with consumers (including people with HIV).	Health Sector: Providers at community health centers and hospital- based health centers
Harm Reduction Services (Division of Mental Hygiene)	With the aim of reducing drug-involved mortality and morbidity, the Division of Mental Hygiene has embraced a harm reduction approach to support the health of people who use drugs including syringe services, expanded access to medication for opioid use disorder including buprenorphine, wide-scale overdose prevention training including naloxone, and fentanyl test strip distribution.	Health Sector: Providers caring for individuals with substance use disorder within health centers and IDNs

### **Future Activities Domain 1:**

### NYC Coalition to Eliminate Racism in Clinical Algorithms (NYC CERCA)

Initial planning for NYC's Coalition to Eliminate Racism in Clinical Algorithms (NYC CERCA) began in July 2021 with the support of an advisory group that outlined the governance, focus areas, timeline, and key metrics for removing inappropriate race adjustment from certain clinical algorithms across NYC health care delivery partners. The CMO convenes 12 health system members who have pledged to end race adjustment in one of three race-based clinical algorithms: estimated globular filtration rate (eGFR), pulmonary function tests (PFTs), or vaginal birth after cesarian (VBAC). Members of NYC CERCA have also agreed to develop an evaluation plan to assess racial health inequities related to the algorithms and a patient engagement plan to avoid delays in care for patients impacted by race adjustment.

## Refreshing Provider Engagement Strategies (CMO serving as an internal convener for the agency)

The Provider Engagement Taskforce was created to outline strategies that foster bidirectional communication between providers (e.g., clinicians), healers (e.g., doulas), and the Health Department, with a particular focus on outreach to BIPOC providers/healers during COVID-19. A cross-agency collaboration is underway to develop a provider directory that will be managed by the CMO and will contain demographic information on providers and healers to facilitate more tailored communication. Currently, the CMO hosts a Black and Latino Provider Collective workgroup which meets bi-weekly to discuss ways to reduce COVID-19 transmission and improve vaccination among communities of color. In addition, a CMO Twitter handle is being developed to focus on the next generation of providers as a key audience. The account will share up-to-date information and data on health equity and anti-racism initiatives in NYC and nationally.

### Global Solidarity and Vaccine Equity

As a city with a large population of international visitors and residents, the NYC Health Department is committed to ending the COVID-19 pandemic by supporting global vaccination efforts. The Health Department made a donation of supplies to India during the height of that country's COVID-19 surge in summer 2021. The CMO will support global vaccine equity efforts by advocating for waivers of intellectual property to facilitate widescale vaccine production and by encouraging more rapid federal vaccination donation efforts.

# **Domain 2: Advancing the Health Department's Commitment to Anti**racism in Public Health Practice and Policy

As a convener of health care delivery partners and others, the CMO will lead collaborative efforts to ensure the implementation of anti-racism policies and practices to address health inequities. This work will require clarity of priorities, sharing of best practices, and peer-to-peer support, as health care delivery partners work to improve access and delivery services for Black, Latino and people of color communities. Given the unequal health outcomes in such conditions as premature mortality and chronic diseases<sup>59</sup> and in services utilization and access to care<sup>60</sup> between White compared to Black, Latino, and people of color communities in NYC, urgent and innovative solutions will be needed. The October 2021 declaration of racism as a public health crisis by the NYC Board of Health adds further urgency to the need for a policy investment in implementing antiracism in health care delivery. In so doing, it provides the groundwork for the CMO and Health Department to engage health care delivery partners in solutions that address racial inequities across sectors.

improving the collection of social determinants of health data for all patients; and removing race adjustment from some clinical algorithms. Most institutions had already identified systems-level leaders to develop strategy around addressing health inequities. Some health systems formed community partnerships that allowed them to start addressing root causes of disease; for example, several health systems worked with local community organizations on violence prevention programs to address the physical trauma cases they managed in their hospitals and clinics. Several health systems welcomed the CMO's assistance to facilitate connectivity to their local community partners to address social determinants of health drivers. Finally, many health systems were striving to include an equity framework into their system-wide quality improvement efforts and were interested in sharing and learning best practices around these efforts from other NYC health institutions.

### **Listening Tour Toplines for Domain 2:**

A majority of the 14 interviewed health systems outlined anti-racism programs within their enterprises. These actions included convening internal committees on Diversity, Equity and Inclusion;

## **Current Activities Domain 2:**

Program	Description	Health Sector Representation
Provider Payment for Vaccine Engagement (CHECW)	Using City dollars, providers who serve Medicaid and Medicare Advantage populations (who are predominantly Black, Latino, and people of color populations) receive payments for outreach efforts to counsel people around COVID-19 vaccinations. This is an example of a health equity program built on incentivizing frontline staff to engage populations who are at increased risk of COVID-19 transmission and death to get vaccinated. The program also addresses some of the barriers that those within health centers and systems face, such as lack of time and payment to do the outreach and counseling work needed to change health behaviors. The CMO will continue to use policy drivers like securing provider payments for vaccines to impact behaviors and close health gaps.	Patient facing health care providers

#### **Future Activities Domain 2:**

## • 1115 Waiver (CMO serving as internal convener for the agency)

Currently under consideration by the NY State Department of Health Office of Health Insurance Programs, the 1115 waiver would allow the Health Department to function as a Health Equity Regional Organization. With NY state's Medicaid coverage of approximately 6.5 million individuals,<sup>61</sup> of whom 22% are Black and 28% are Latino, Medicaid has a major impact on the health care financing and quality of New Yorkers.<sup>62</sup> The Health Department would provide technical and moral leadership to channel Medicaid reimbursements for activities that address social determinants of health inequities. The CMO would leverage the Health Department's immense data analytics, health care policy and payment expertise to drive forward anti-racism changes in the health care delivery system. The funding from the 1115 waiver would be particularly beneficial to safety-net providers and hospitals which predominantly serve low income and communities of color in NYC.

## Policy Paper on Reparations and Racial Wealth Gap Analysis (CHECW)

Working with leads from the Federal Reserve Bank, the Health Department will write a white paper that synthesizes existing literature on the relationship between health and wealth and reflects on the limited data currently available on the wealth gap in NYC. This white paper, and additional data collection and analysis following it, will allow the CMO to start addressing the root cause of health inequities with partners within and outside the health sector. One anticipated next step will be developing a policy position on the utility of federally paid reparations for descendants of enslaved peoples to improve health outcomes and achieve health justice.

### Health Care Segregation Priorities (CHECW)

New York City is one of the most racially segregated health care markets among major cities in the United States, resulting in its safety-net hospitals and facilities caring for a predominance of the City's low income and racial/ethnic minority populations. Racial segregation in health care is in part maintained by racialized reimbursement systems that directly incentive health care providers to deliver segregated care. Leveraging the Health Department's immense capabilities in qualitative and quantitative analysis, the CMO will lead mixed methods research to monitor and determine the root causes of racially segregated care delivery.

This research will then identify policy, fiscal, and practice solutions to address care segregation. It will be conducted in close collaboration with community- and faith- based organizations, policymakers, student groups, and other advocacy groups. The CMO will leverage the Health Department's authority and the Board of Health's resolution on racism as a public health crisis to translate identified solutions into health care desegregation.

## **Domain 3: Building Institutional Accountability**

Given the competing priorities many health care delivery partners face daily, the CMO will ensure consistent progress with collaborating health care delivery partners through establishing a system of accountability and transparency around anti-racism priorities. While the State of New York is the regulatory body over health systems statewide, including for New York City, the NYC Health Department CMO will work with health care delivery partners in support of internal reform efforts, specifically around health equity initiatives. This is not a legal approach but one in pursuit of equitable care. This accountability begins by ensuring that health care delivery partners undertake health equity initiatives with (a) thoughtful framing grounded in healing and justice and (b) by building directly upon their existing quality improvement infrastructure. The CMO will work with health care delivery partners to learn and utilize tools like the Healing ARC framework to advance their health equity initiatives.63

The Healing ARC framework outlines a reparations-based approach to working with communities that have historically been impacted by racist policies and practices. The first portion of the Healing ARC Framework is "Acknowledge," which describes the importance of admitting the historic wrong that led to the occurrence of unequal care delivery. For example, in a project led by Dr. Morse and colleagues to apply the Healing ARC Framework to patients with heart failure in Brigham and Women's Hospital, the work of "acknowledging" involved taking ownership for the systematically racist policies that had led to fewer Black patients accessing the hospitals' life-saving heart failure services; this acknowledgment work was conducted by hospital leadership with Black and Latino community members.

The next step in the Framework is to "Redress" the historic wrong. In the example from Brigham and Women's Hospital, triage from the emergency room to the cardiology service was offered as a preferential admission option for Black and Latino patients to actively correct and counterbalance the reality that White heart-failure patients were being systematically sent to the cardiology service more often than Black and Latino patients for the past decade. Finally, the "C" in the Healing ARC framework describes a process of "Closure," where discussions with community members, patient stakeholders, and institutional representatives take place to ensure that the inequity has been addressed and that measures are in place to prevent its recurrence.

In addition to applying the Healing Arc Framework, Domain 3 also includes the need to create systems that allow for transparency of work conducted with the Health Department and health sector to implement anti-racist policies and practice in care delivery. One opportunity is the development of a citywide health equity dashboard where health care delivery partners can review progress on key metrics. This dashboard would draw from existing best practices, such as a dashboard by the Massachusetts state government depicting health outcomes by race and ethnicity for public review.<sup>65</sup> Another mechanism may be in the form of quarterly or bi-annually report cards where members share information on respective key process indicators in their various areas of strategic enterprise-wide planning.

#### **SPOTLIGHT:**

After identifying several key priority health areas, the Minnesota Department of Health selected indicators including health measures around prenatal and breastfeeding outcomes and social determinant of health indicators including income level and home ownership to track success on achieving these health priorities; as an example of driving accountability around tracking indicators, subgroups were created and equipped with real time data on how health and social determinants metrics evolved over time.

## **Listening Tour Toplines for Domain 3:**

All health systems engaged on the Listening Tour noted the importance of data collection in supporting their health equity efforts. Internally, several were working to implement systemwide report cards that accounted for race and ethnicity in key process indicators such

as quality and utilization. One institution had adapted the Institute of Medicine's six central quality areas to include an equity framing and was reviewing how to operationalize these metrics within several service lines. Likewise, NYC Health + Hospitals uses a health equity dashboard to track progress toward its health equity strategy. Of note,

a few health systems did not report capturing health equity data or utilizing accountability tools such as dashboards or report cards; this absence points to an area for improvement and learning that the CMO may support. Health systems also commented on data shared by the Health Department, specifically that receiving data on rates of COVID-19 and

vaccination from the Health Department was one of the most beneficial aspects of their partnership. Several health systems expressed wanting this data sharing to continue, but also welcomed an opportunity for more collaboration around what metrics were measured and how they were obtained.

## **Current Activity Domain 3:**

Program	Description	Health Sector Representation
Maternity Hospital Quality Improvement Network (MHQIN) (Division of Family and Child Health)	The Maternity Quality Improvement Network (MHQIN) delivers clinical and community- and faith- based strategies to improve maternal outcomes for Black birthing people. The multi-component strategies within MHQIN target individual and institutional drivers of racial and ethnic disparities in maternal health outcomes. To support these efforts, the Health Department partnered with NYC maternity facilities to eliminate racial and ethnic disparities in severe maternal morbidity and maternal mortality. Through the recognition that institutional transformation requires addressing structural racism, anti-racism, equity, and trauma-informed systems change, MHQIN integrates trainings and technical assistance to participating hospitals.	Birthing centers (e.g., hospitals- based or home maternity centers)

## **Future Activity Domain 3:**

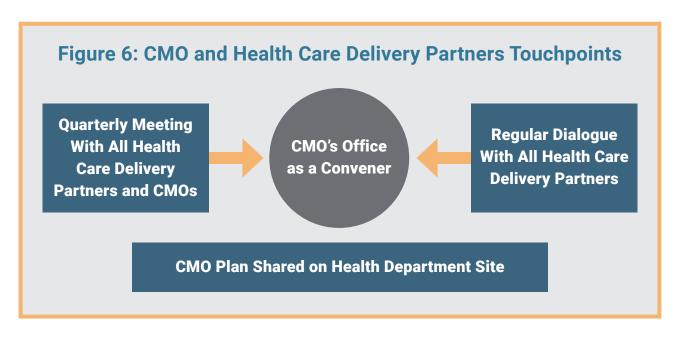
## • Citywide Health Equity Dashboard (CHECW)

The Citywide Health Equity Dashboard will transparently share data and analytics around health equity efforts to facilitate cross-sectoral learning and dissemination of best practices. There are several potential priority areas including severe maternal morbidity; racial and gender diversity in the health care delivery partners' leadership; behavioral health inequities; efforts to address the inaccurate use of race in clinical algorithms; and health care segregation.

# **Tracking Progress**

The strategies outlined in this Strategic Plan will only be successful if they are actively managed, measured, and reported. At the time of this Plan's publication, the CMO is in the process of launching quarterly workshops with health care delivery partners and CMOs across the city to review progress and discuss alignment around the three domains. Workshop agendas will be co-designed with leads from health care delivery partners. This will allow all participants to make suggestions for meeting content and to prepare to share their progress and challenges with the group in ways that are robust, meaningful, and action-oriented.

Between meetings, the CMO will provide newsletter updates on progress-todate, with a focus on success stories across health care delivery partners and on best practices to navigating common challenges. In addition, the CMO will continue to strengthen the Health Department's relationships with health care system leads through oneon-one conversations. Because health care delivery partners already have wellestablished intra-organizational pathways to distribute information such as intranet communications and newsletters, the CMO will work to leverage internal communication routes to stay connected to health system staff.



## Conclusion

Following closely after the NYC Board of Health's declaration of racism as a public health crisis in October 2021, the CMO role offers a pathway to align the goals, strategy, and tactics of the Health Department and health care delivery partners to bridge public health and health care and to deliver on anti-racism policies and practice. This work will build on initiatives currently underway at the Health Department and will ensure that current and future initiatives are bolstered by health care delivery partners.

The focus on anti-racism policies and practice is particularly vital at a time when social movements and a global pandemic have offered the latest call-to-action around implementing equitable health care delivery. The CMO role can move health equity forward through stronger partnerships with organizations, such as community- and faith-based organizations and health care delivery partners, that are most proximate to Black, Latino, and other people of color populations who have faced historic marginalization.

The work outlined in the three Domains utilizes a local, place-based focus which is supported by efforts to guide policy and provide platforms for collective action. Initiatives like the Hospital Violence Prevention Initiative, Public Health Corps, and Take Care New York use locally-sourced insights to create programming that serves the needs of the neighborhood. Other efforts, such as the 1115 Waiver and advocating for racial wealth gap closure and reparations provide the policy and, in some cases, financial restitution to drive local change. Finally, activities like the NYC Coalition to End Racism in Clinical Algorithms, the first of its kind in the country, provide an opportunity to create collective strategy and action around implementing health system-based change to reduce racial health inequities and barriers to accessing care.

The success of the Strategic Plan lies in the strength of the coalition of its partners. Using quarterly meetings and digital and in-person touchpoints — the foundation of which have been laid

with the Listening Tour — the CMO will ensure consistent investment into the relationship between health care delivery partners and the Health Department.

We call on health care delivery partners, providers, healers, and community members to join us in the work of ensuring equitable care for all New Yorkers.

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## **Appendices**

## **APPENDIX A: RACE TO JUSTICE TERMS**

## **Glossary of Key Terms**

#### **HEALTH EQUITY**

- Health equity: The attainment of the highest level of health for all people. Additionally, no one is disadvantaged from attaining the highest level of health "because of social position or other socially determined circumstances." (Source: Adapted from Healthy People 2020 and CDC.)
- Health inequity: Differences in health outcomes, rooted in social and structural inequities that are avoidable, unfair and unjust. (Sources: Adapted from NACCHO and BPHC)
- **Health disparities:** The metrics we use to measure progress toward achieving health equity. (Sources: Adapted from Paula Braveman.)
- **Population health:** The health outcomes of a group of individuals, including the distribution of such outcomes within that group. (Source: APHA.)
- **Public health:** The promotion and protection of the health of people and the communities in which they live, learn, work and play. (Source: APHA.)
- Social determinants of health: The conditions in which people are born, live, learn, work, play and age that contribute to (determine) health outcomes. (Source: Healthy People 2020.)

### **RACAL EQUITY & SOCIAL JUSTICE**

• **Diversity:** The condition of having or being composed of differing elements, especially the inclusion of different types of people (as people of different races or cultures) in a group or organization (Source: Merriam Webster). There are many kinds of diversity, based on race, gender, sexual orientation, class, age, country of

origin, education, religion, geography and physical or cognitive abilities. Valuing diversity means recognizing differences between people, acknowledging that these differences are an asset, and striving for diverse representation as a critical step towards equity. (Source: Race Forward)

- **Equity:** Trying to understand and give people what they need to enjoy full, healthy lives. (As opposed to equality, which aims to ensure that everyone gets the same things in order to enjoy full, healthy lives. Although equality may also aim to promote fairness and justice, it can only work if everyone starts from the same place and needs the same things.) (Source: SGBA e-Learning Resource: Rising to the Challenge.)
- Ethnicity: A social construct that divides people into smaller social groups based on characteristics such as shared sense of group membership, values, behavioral patterns, language, political and economic interests, history and ancestral geographical base. (Source: Maurianne Adams, Lee Anne Bell and Pat Griffin, editors. Teaching for Diversity and Social Justice: A Sourcebook. New York: Routledge.)
- **Implicit Bias:** The brain's automatic, instant association of stereotypes or attitudes toward particular groups, without our conscious awareness.
  - The split-second decisions our brains make (e.g. reactions to or assumptions about someone) without our realizing it. (Adapted from: Perception Institute)
- Inclusion: The action or state of including or of being included within a group or structure. More than simply diversity and numerical representation, inclusion means authentic and empowered participation and a true sense of belonging. (Source: Race Forward, Core Concepts.)
- Intersectionality: a term coined in 1989 by American civil rights advocate and scholar of critical race theory Kimberlé Williams Crenshaw described as overlapping or intersecting social identities and related systems of oppression, domination, or discrimination. The idea the multiple identities intersect to create a whole that is different from the component identities. (Source: Crenshaw, K.W. "Mapping the Margins: Intersectionality, Identity Politics, & Violence Against Women of Color" Stanford Law Review Vol. 43:1241)
  - A theory used to analyze how social and cultural categories intertwine. One of the core tenets of this theory is that social identities are not independent and one-dimensional; they are multiple and intersecting. (Source: Bowleg, L. The Problem with the Phrase Women and Minorities: Intersectionality-an Important Theoretical Framework for Public Health. American Journal of Public Health. 2015. 102(7): 1267-1273.)
- **Oppression:** A system that maintains advantage and disadvantage based on social group memberships, and operates on individual, institutional and cultural levels.
  - Individual: Attitudes and actions that reflect prejudice against a social group (unintentional and intentional).

- Institutional: Policies, laws, rules, norms and customs enacted by organizations and social institutions that disadvantage some social groups and advantage other social groups (intentional and unintentional).
- Societal/Cultural: Social norms, roles, rituals, language, music and art that reflect and reinforce the belief that one social group is superior to another (intentional and unintentional) (Source: Antoinette Myers & Yuka Ogino.)

#### Power:

- The ability or right to control people or things (Source: Merriam-Webster Dictionary)
- The legitimate and collective control of, or access to, systems sanctioned by the state. (Source: Race Forward)

## Privilege:

- Unearned advantage
- A set of advantages systemically conferred on a particular person or group of people. White people are racially privileged, even if they may be economically underprivileged. Privilege and oppression go hand in hand: they are two sides of the same power relationship, and both sides must be understood and addressed. People can be disadvantaged by one identity and privileged by another. (Source: Race Forward.)

#### Race:

- A socially constructed system of categorizing humans largely based on observable physical features (phenotypes) such as skin color and ancestry.
   There is no scientific basis for or discernible distinction between racial categories. The ideology of race has become embedded in our identities, institutions and cultures and is used as a basis for discrimination and domination. (Source: Race Forward, Core Concepts.)
- A specious classification of humans created by Europeans (in the 17th & 18th centuries) using "White" as the model of humanity for the purpose of establishing and maintaining social status, privilege, and a legitimate relationship to power (Source: The People's Institute)
- Racial anxiety: the brain's stress response before or during inter-racial interactions.
  - For people of color, racial anxiety happens when they fear they will experience bias from someone else, through discrimination, hostile treatment, or invalidation.
  - For White people, racial anxiety happens when they fear their actions will be perceived as racist, or that they will be met with distrust or hostility. (Source: Perception Institute)

- Racial equity: The condition that would be achieved if one's racial identity no longer
  predicted life outcomes. This includes elimination of policies, practices, attitudes
  and cultural messages that reinforce differential outcomes by race or fail to eliminate
  them. Racial equity is a necessary part of social justice. (Source: Adapted from
  Center for Assessment and Policy Development.)
- Racial justice: The systematic fair treatment of people of all races, resulting in equitable opportunities and outcomes for all. Racial Justice is the process to achieve Racial Equity, the outcome. (Source: Race Forward.)
- Racism: A system of power and oppression that structures opportunities and assigns
  value based on race and ethnicity, unfairly disadvantaging people of color, while
  unfairly advantaging Whites. Racial prejudice + power = racism. (Sources: adapted
  from C. Jones & People's Institute.)
  - Institutional racism occurs on the level of institutions. This is when policies, practices, and systems within institutions create and sustain racialized outcomes. (Source: Race Forward.)
  - Internalized racism operates on a psychological level within individuals. These
    may be conscious or unconscious beliefs about ourselves and others based on
    race. (Source: Race Forward.)
  - Interpersonal racism occurs between people. Interpersonal racism exists when
    we bring our private beliefs and biases into our communications and interactions
    with others of a different race. (Source: Race Forward.)
  - Structural racism is racial bias across institutions and society. It is the system of structures, institutions and policies that work together to advantage White people and disadvantage people of color. It is the broadest manifestation of racism and encompasses multiple dimensions: (Source: Race Forward.)
    - History
    - Culture
    - Interconnected policies and institutions
    - Racial ideology
- Scientific racism: During the 19th century, science was increasingly used to justify
  racist ideas and practices, including slavery. Samuel Morton's 1839 illustrated book,
  Crania Americana, examined skull shapes to justify a racial hierarchy. The book became
  extremely influential throughout the century, creating a pseudo-scientific foundation for
  the justification of Black slavery, Native American genocide, and later the emergence of
  Eugenics under Francis Galton (Source: Undesign the Redline. Design the We)
- **Social construct:** An idea that has been created and accepted by the people in a society (e.g. race, class, gender). (Source: Merriam-Webster.)

- **Social justice:** The equitable distribution of goods, resources and opportunities, informed by inclusive participation of all people in social decision making. (Source: Adapted from NACCHO.)
- **Stereotype threat:** the brain's impaired cognitive functioning when a negative stereotype is activated.
  - We are worried about confirming a negative stereotype about ourselves. This
    gets in the way of our ability to perform on a task. (Source: Perception Institute)
- Systemic equity: A combination of interrelated elements consciously designed
  to create, support and sustain social justice. It is a robust system and dynamic
  process that reinforces and replicates equitable ideas, power, resources, strategies,
  conditions, habits and outcomes. (Source: Race Forward, Core Concepts.)
- White fragility: A state in which even a minimum amount of racial stress becomes
  intolerable, triggering a range of defensive moves. These moves include the
  outward display of emotions such as anger, fear, and guilt, and behaviors such as
  argumentation, silence, and leaving the stress-inducing situation. These behaviors, in
  turn, function to reinstate White racial equilibrium. This paper explicates the dynamics
  of White Fragility.
  - White people in North America live in a social environment that protects and insulates them from race-based stress. This insulated environment of racial protection builds White expectations for racial comfort while at the same time lowering the ability to tolerate racial stress, leading to what has been termed White Fragility. (Source: International Journal of Critical Pedagogy, Vol 3 (3) (2011) pp 54-70)

## • White privilege/White skin privilege:

- A set of unearned advantages and/or immunities that White people benefit from on a daily basis beyond those common to all others.
- Can exist without White people's conscious knowledge of its presence and it helps to maintain the racial hierarchy in this country. (Source: Mt. Holyoke College)
- A societal privilege that benefits White people beyond what is commonly experienced by non-White people under the same social, political, or economic circumstance.
- An interchangeable term for "systemic racial privilege"
- Does not deny individual hardship
- Is one of many types of privilege (i.e., economic privilege, gender privilege, heterosexual privilege, able-bodied privilege, allosexual privilege, etc.)

White supremacy: An historically based, institutionally perpetuated system of
exploitation and oppression of continents, nations, and peoples of color by White
peoples and nations of the European continent, for the purpose of maintaining and
defending a system of wealth, power, and privilege (Source: The Challenging of White
Supremacy Workshop, San Francisco, CA & Collective Liberation)

**Note:** Given the changing demographic trends in the United States, the word "minority" no longer accurately reflects the four primary racial/ethnic groups. The terms "emerging majority" and "people of color" have become popular substitutes. Also, the terms used to refer to members of each community of color have changed over time. Whether to use the terms African American or Black, Hispanic American or Latino, Native American or American Indian, and Pacific Islander or Asian American depends of a variety of conditions, including geographic location, age, generation, and, sometimes, political orientation. (Source: Race Forward.)

## **APPENDIX B: MICHELLE MORSE BIOGRAPHY**

## Dr. Michelle Morse, Deputy Commissioner CHECW, Inaugural CMO

Michelle Morse, MD, MPH is an internal medicine and public health doctor who works to achieve health equity through global solidarity, social medicine and anti-racism education, and activism. She is a general internal medicine physician, part-time hospitalist at Kings County Hospital, Assistant Professor at Harvard Medical School, and Co-Founder of EqualHealth, which builds critical consciousness and collective action globally to achieve health equity for all. In 2015 Dr. Morse worked with several EqualHealth partners to found the Social Medicine Consortium (SMC), a global coalition which uses activism and disruptive pedagogy rooted in social medicine to advance health justice. She served as Deputy Chief Medical Officer of Partners In Health (PIH) from 2013 to 2016 and now serves on the Board of Directors of PIH. While serving as Deputy CMO of PIH, she developed and launched the first three residency training programs at PIH's new 300-bed teaching hospital in Mirebalais which became the first ACGME International accredited hospital in a low-income country. In 2018, Dr. Morse was awarded a Soros Equality Fellowship to launch EqualHealth and the SMC's global Campaign Against Racism. From September 2019 to January 2021, she served as a Robert Wood Johnson Health Policy fellow in Washington, DC and worked with the Ways and Means Committee, Majority Staff, in the U.S. House of Representatives. Through her efforts in Congress, EqualHealth and PIH, Dr. Morse has demonstrated a commitment to equity work in local, federal and global settings. Currently, Dr. Morse serves as the Deputy Commissioner for the Center for Health Equity and Community Wellness

(CHECW) and inaugural Chief Medical Officer at the NYC Department of Health and Mental Hygiene. Dr. Morse is responsible for leading the agency's work in bridging public health and health care to reduce health inequities, guiding CHECW's place-based and cross-cutting health equity programs, and serving as a liaison to clinicians and clinical leaders across New York City.

## **APPENDIX C: LISTENING TOUR QUESTIONS**

Categories	Sample Questions
Health System – DOH	How is the Health Department viewed by your hospital/ health system?
Relationship	a. From your perspective, what is the Health Department's role in health care in NYC?
	2. What is the ideal relationship between the Health Department and your hospital/health system?
	a. How could this relationship strengthen and advance health equity and anti-racism in medicine and public health?
	b. How could this relationship strengthen engagement between your health system and the communities it serves?
	3. What other areas could be improved if the relationship between the Health Department and your hospital/health system were to strengthen?
	4. What would you like to see the Health Department do more of?
	5. What has been your most successful programmatic partnership with the Health Department?
Public Health Priorities	6. What role do you see your hospital/health system playing in the promotion of public health practice? For example, but not limited to: chronic disease prevention, surveillance and epidemiological data collection, community outreach and engagement, public health emergency preparedness, etc.
	7. What are your hospital/health system's public health priorities?  How were these priorities developed?

Categories	Sample Questions
Anti-racism and Health Equity	8. Are there additional resources your hospital/health system needs to advance your health equity and anti-racism strategy? If so, what are they?
Strategies	9. What areas of support could the Health Department assist with pertaining to your hospital/health system's equity and anti- racist goals?
Communications	<ul><li>10. What are the areas the Health Department can improve on regarding communication with your hospital/health system?</li><li>11. Would you support the development of a system for longitudinal communication between your hospital/health system and the Health Department?</li></ul>

## **APPENDIX D: ENVIRONMENTAL SCAN**

California	Los Angeles County, CA, Five Year Health Action Plan
	The Los Angeles five year health action plan seeks to sustain efforts to reduce health inequities to ensure just health outcomes in LA county., including infant mortality rates, STI rates, and poor health due to exposure of toxic emissions. Some measurable deliverables include:
	<ul> <li>By June 30, 2019, partner with at least two delivery hospitals and/or managed care organizations to develop a plan for implicit bias training of maternity staff. Complete training by December 2019.</li> </ul>
	<ul> <li>By June 30, 2019, partner with at least two delivery hospitals and/or managed care organizations to develop a plan for implicit bias training of maternity staff. Complete training by December 2019.</li> </ul>

•	By June 30, 2020, train at least 50 prenatal and pediatric
	clinic staff regarding Help Me Grow, an enhanced service
	coordination system for children with special health care
	needs.

 By June 30, 2020, promote and ensure health plan and payor coverage for STI screening and testing services are consistent with current STI screening recommendations for populations at risk for STIs.

By December 31, 2020, ensure that commercial health plans, public and private primary care and specialty care providers, family planning centers, and public and private health care delivery providers track and improve their adherence to STI screening and testing recommendations based on age, gender, race and ethnicity, sexual orientation and pregnancy status.

## Georgia

## Atlanta, GA- Chief Health Officer

In 2019, Mayor Keisha Lance Bottoms announced the appointment of Dr. Angelica Geter Fugerson to serve as the first ever Chief Health Officer for the City of Atlanta. The Chief Health Officer focused on improving the leading causes of illness and disability in Atlanta, improving health literacy rates, and assessing emerging health needs to improve community health. A primary goal of the position will be to build coalitions across the city to reduce new HIV transmissions, asthma rates, diabetes, and other chronic illnesses affecting the Atlanta community. The Chief Health Officer also actively played an integral role in community engagement efforts. Dr. Fugerson advises the Mayor and serve as the bridge between key stakeholders including Fulton and DeKalb counties (which are tasked with public health by state law), local hospitals, and other community health organizations to ensure coordination and consistency across overlapping areas of service. The Chief Health Officer also identified priorities for action and direct municipal activities and investment with the goal of improving the long-term health outcomes of Atlanta residents. A major initial goal of this position was to address the heavy burden and disparities of the city's HIV/AIDS epidemic. Six months later, the

	first case of COVID-19 was reported in the US, which then became Fugerson's exclusive focus. She and Felipe den Brok, the city's director of emergency preparedness, were tapped to lead the mayor's Pandemic Coordination Team.
Louisiana	New Orleans, LA, Jurisdictional Environmental Scan
	An environmental scan of the New Orleans Health Department (NOHD) was conducted to identify practices and policies relevant to building the capacity of a local governmental public health agency to address health equity. Equity was never questioned as an ideal; however, it was noted that "the extensive responsibilities for governmental public health" and "limited resources including time, staff and funding" were the reasons that entities such as NOHD were not the primary lead, but rather a facilitator in ending racial inequity. Effectively working in collaboration with community members was consistently described as a litmus test for the authenticity of governmental efforts. Although historically inequitable power dynamics and limited resources were again mentioned as obstacles, "meaningful community engagement" and deep engagement with residents was emphasized as an area that should receive more attention.
	Three overarching themes emerged in the scan's conclusions: (1) the long history and enduring impact of systemic racism, (2) the role of public health organizations and institutions in ending racial inequity, and (3) the importance of community relationships in the pursuit of equity. Governmental public health agencies in New Orleans and across the nation have engaged in cross-sector efforts to confront the factors that underlie health disparities, collaborations critical to advance racial equity. The nature of these projects varies widely, but they are largely policy focused and include such efforts as targeting zoning policies to improve the built environment, conducting impact assessments to examine the potential community health impacts of policies, and advocating for citywide policies aiming to protect the public's health.

#### Massachusetts

Boston, MA, Collaborative for Health Equity

The collaborative for health equity has the following goals:

- Coordination of a Health Equity Training Center that provides education, training, and technical assistance;
- Development of training curricula and materials to educate community health workers, health care providers, and public health professionals about the social determinants of health and racial and ethnic disparities;
- Establishment of the New England Partnership for Health Equity, which is a learning collaborative among New England communities engaged in health equity work;
- Development and implementation of blueprints for action and community coalition building;
- Facilitation of a variety of regional and national activities to support a broad-based health equity movement; an Advocacy to eliminate racial and ethnic health disparities through data collection, policy, and strategy development at the local, state, and federal levels.

### Boston Medical Center, Medical Legal Partnership

A strategy for putting more health into the delivery of health care is for hospitals and other health care providers to be proactively engaged in connecting patients with supportive social services that will help them to improve their health. The Medical Legal Partnership (MLP) is a program that was developed in the Pediatrics department at the Boston Medical Center over three decades ago that addresses the social determinants of health [80]. MLP enabled primary care providers to refer patients to a new category of specialists: on-site attorneys. The program is premised on the idea that most low-income persons face legal issues that affect their quality of life and their management of disease. The addition of lawyers to the medical team facilitates screening families for, and assisting them with, problems that can affect effective care and illness management. The stressors addressed include challenges in the areas of housing, immigration, income

support, food, education access, disability and family law. The MLP program is now at hundreds of health care sites in the U.S.

## Massachusetts Health Disparities Council

The Health Disparities Council was officially created as a part of the Massachusetts health care reform law passed in 2006. The Council arose from the recognition that addressing disparities in health requires a broad convening of stakeholders who can bring their expertise and perspective in order to develop actionable solutions to a complex problem. Its mission and intended purpose, as stated in the enabling legislation, is to: make recommendations to reduce and eliminate racial and ethnic disparities in access to quality health care and in health outcomes within the commonwealth, including disparities related to breast, cervical, prostate and colorectal cancers, strokes, and heart attacks, heart disease, diabetes, infant mortality, lupus, HIV/AIDS, asthma, and other respiratory illnesses; consider environmental, housing and other relevant matters contributing to these disparities, and make recommendations to increase racial and ethnic diversity in the health care workforce, including doctors, nurses and physician assistants.

Council representation includes a diverse mix of stakeholders, including: State government representation (Attorney General, Department of Public Health, Commissioner, Department of Public Health, Director of the Office of Health Equity, Executive Office of Health and Human Services, Secretary, Massachusetts House of Representatives, (3 members), Massachusetts Senate, (3 members), MassHealth, Director Community representation, and eight community members from areas disproportionately affected by health disparities. Associations, local boards of health and health care representation of 18 additional people are appointed by the co-chairs, from a list of nominees submitted by various organizations, including American Cancer Society, American Heart Association, Blue Cross Blue Shield of Massachusetts, Boston Public Health Commission, Dana Farber

	Cancer Institute 8. Harvard School of Public Health, Program to Eliminate Health Disparities, and Massachusetts Association of Health Plans.
Minnesota	Minnesota Department of Health, 2020 Health Improvement Framework  In 2012, MDH created the Healthy Minnesota 2020 Statewide Health Improvement Framework to lay the groundwork for collective action and to shift resources to advance health equity. The framework identified 3 health priorities and indicators to track progress toward each. The indicators include traditional indicators such as prenatal care and breastfeeding, as well as social determinants of health indicators related to education, income, home ownership, and incarceration. All of the indicators are paired with data illustrating existing inequities, an explicit statement of why the indicator is an important measure of well- being, and evidence-informed strategies to achieve the priorities. To implement framework strategies, the Partnership created subgroups to develop strategies to: 1) develop and use narratives that emphasize health-generating factors and the opportunity to be healthy; 2) advocate for Health in All Policies; and 3) reduce duplication of effort and promote collaboration and synergy among state planning efforts. Importantly, as the statewide framework for how to improve health, the document provides guidance to 1,400 MDH staff located in the Twin Cities and 7 offices across Minnesota.  Minnesota Health Department, Eliminating Health Disparities Initiative In 2001, the Minnesota legislature established the Eliminating Health Disparities Initiative (EHDI) to address health disparities and "improve the health status of Minnesota's populations of color and American Indians." The EHDI legislation identified 10 health priorities, including a goal to decrease racial health disparities in infant mortality and adult and child immunization rates by 2010.

Since 2002, EHDI has been advised by a culturally diverse advisory board and allocated a total of \$9.5 million in competitive grants per biennium to local programs and projects statewide. Each year, roughly 50 organizations working in communities of color and American Indian tribes receive EHDI grant funding to develop and implement best practice strategies for the 10 priority health areas.

## National (United States)

NIH and PCORI, Community Health Workers

The integration of community health workers (CHW) into the delivery of health care is another promising strategy. CHWs are health workers who have received formal but limited training and work to improve community health outside of health care facilities. Research over the last 25 years has shown that these workers can improve community health in low-, middle, and high income countries. Reviews of research in the U.S. indicate that CHW interventions have been effective in improving the control of high blood pressure and reducing cardiovascular risk, enhancing diabetes control, managing HIV infection, and increasing the uptake of cancer screening tests.

A partnership between the National Institutes of Health (NIH) and the Patient-Centered Outcomes Research Institute (PCORI) has funded two pragmatic trials testing care models integrating community health workers into primary care teams to reduce disparities in hypertension control in racial minority and rural populations. These studies also aim to elucidate and address barriers to implementing these care models in clinics caring for patients from underserved communities. A panel of the NAM has highlighted the enormous potential of the routine screening of all patients for the social determinants of health, as a part of comprehensively addressing the needs of patients. It has recommended social and behavioral factors that should be captured in the electronic medical record (EMR). In addition to race/ethnicity and education, it calls for the inclusion of brief indicators of the following factors: financial strain, stress, depression, physical activity, tobacco use, alcohol use, social ties, intimate-partner violence, current residential address and censustract median income.

Community Aging in Place, Advancing Better Lives for Elders

The Community Aging in Place, Advancing Better Living for Elders (CAPABLE) program uses an inter-professional team (an occupational therapist, a registered nurse, and a handyman) to help low-income older individuals with self-care disabilities achieve functional goals they set. A demonstration project conducted in 2012–2015 revealed that 75% of participants had improved their performance of activities of daily living over a five-month period. In an RCT of the program, 79% of participants improved. There were significant improvements in activities of daily living (ADLs) and independent activities of daily living (IADLs) and reductions in depressive symptoms. The program cost less than \$3000 per participant and provided a 10-fold return on investment via reduced health care utilization.

Hospitals are often the largest employer in many communities. Health care systems and other health care providers can make effective use of local community resources and strengthen their surrounding communities by providing job training and job opportunities (e.g., as community health workers or medical assistants) in health care to community residents with limited educational attainment that constrains their economic prospects. Such initiatives can help to improve the economic security, stability and health of people in low-income communities while simultaneously addressing a growing need for health care workers.

National Academies of Science Committee, Social Services and Health care

A committee of the National Academies of Sciences, Engineering, and Medicine is currently examining the potential for integrating services addressing social needs and the social determinants of health into the delivery of health care to achieve better health outcomes and to address major challenges facing the U.S. health care system, including health care disparities. The committee will make recommendations on how to: (1) expand social needs care services; (2) better coordinate roles for social needs care providers in interprofessional care teams across the continuum of clinical

and community health settings; and (3) optimize the effectiveness of social services to improve health and health care. Recommendations may address areas such as integration of services, training and oversight, workforce recruitment and retention, quality improvement, research and dissemination, and governmental and institutional policy for health care delivery and financing.

## Health Leads, United States

Health Leads (HL) is another innovative program that places undergraduate student volunteers in the waiting rooms of hospital clinics or health centers. They assess patients' needs regarding food, housing, heating or other social issues. They then "fill" the prescription for food assistance, employment or housing improvement by connecting patients to local resources through in-person meetings or telephone calls. A study of 1059 low-income families at a pediatric clinic found that the most prevalent needs for families were in employment (25%), housing (14%), childcare (13%), health insurance (11%) and food assistance (10%). Within six months of contact with HL desk, half of the families had received help from at least one community resource. HL is currently in multiple waiting rooms of hospital clinics and health centers across the U.S.

## Nurse Family Partnership, United States

The Nurse-Family Partnership (NFP) program is an innovative early childhood intervention that seeks to address the health and social needs of mothers and their infants within the health care system. In the NFP, nurses make home visits to low-income, first-time mothers. The visits begin during pregnancy and continue after the baby is born. The visits take a comprehensive view of the mother's life and seek to improve maternal and child health, as well as address future life opportunities and economic self-sufficiency for the mothers and enable them to provide nurturing and competent childcare. The care delivered through three RCTs (one in upstate New York with predominantly White women, one in Memphis,

	Tennessee with predominantly African American women and one in Colorado with predominantly Latinas) have documented that the program has positive effects for both parent and child [18]. Mothers in the control group received traditional prenatal care so the NFP documented the effects of the additional services provided by the program. For mothers, the NFP led to lower smoking during pregnancy, fewer subsequent pregnancies, increased labor force participation, reduced use of public assistance programs, and lower rates of child abuse and neglect. Among the children, the program led to a reduction in childhood injuries, substance use and juvenile crime. An evaluation of the three NFP trials estimated that the program saves \$18,054 for each family served.
New York	New York City Department of Health and Mental Hygiene, Take the Pressure Off!  NYC build the first Citywide High Blood Pressure Initiative, Take the Pressure Off, NYC in 2016 with a multisector approach to achieve population-wide impact. the Health Department convened stakeholders to develop a citywide plan to reduce high blood pressure with a steering committee made up of 34 representatives from 10 sectors, including a strategic payer initiative and a metrics group. In two months, they built a framework, convened a multisector coalition for coordinated action, and developed an inaugural plan for the initiative. The plan's key areas were to raise awareness of high blood pressure, create an environment that promotes heart-healthy behaviors, and support treatment adherence. The effort was implemented and currently working on its goal, reducing raised blood pressure in NYC by 2015 by 2022.
Texas	Harris County Public Health, Healthy Living Matters  Harris County Public Health's (HCPH) strategic plan has placed health equity in internal policies. HCPH's Healthy Living Matters program, which focuses on reducing and preventing childhood obesity implemented community-centric efforts addresses the structural issues in the community including access to healthy

foods, built environment impediments, neighborhood and school walkability/physical activity, and civic engagement. With the aim of broadening the conversation on health equity to include those who are working in the health care industry, HCPH released the 2016 report, "Moving Upstream: The State of Health care in Houston/Harris County and Its Response to Social Determinants". The HCPH Health Equity Coordinator position was embedded as part of its recent responses to Zika and Harvey.

Harris County, Patient Care Intervention Center

The PCIC (Patient Care Intervention Center) is a collaborative model bringing together multiple stakeholders from various sectors (health care organizations, health plans, law enforcement, behavioral health, emergency medical services (EMS), and community organizations) to address the health needs of the super utilizers (e.g., homeless, formerly incarcerated). PCIC's work is highly intensive, and is another example where a smaller collaborative is appropriate for the desired outcome. Gateway to Care is an example of an organization that can act as a focal point or coordinator of community collaborations especially on grassroots efforts. They have been responsible for efforts related to increasing the number of Federally Qualified Health Centers (FQHC), community health workers (CHW) state legislative efforts, and health access. During the interviews, many people brought up the role of conveners - those organizations that could bring parties together for collaborative purposes either due to their influence and/or their resources. The two that came up most often were Harris County Public Health, the Episcopal Health Foundation, and Gateway to Care.

### Virginia

Richmond City Health Department, Community Health Resource Centers

In Virginia, the Richmond City Health Department (RCHD) partnered with the Richmond Redevelopment Housing Authority (RRHA) to establish <u>Community Health Resource Centers</u> in several high-risk housing communities in the city. To bridge

the gap in access to care among residents, vacant apartments were converted into medical clinics where the community could receive family planning, gynecology, sexually transmitted disease services, support groups, health classes, and blood pressure and glucose screenings. Community involvement in the placement and resources offered by the centers has proven to be beneficial. Resource center staff routinely seek feedback from the residents about types of programs and classes to offer. Through awarded grants, residents of these high-risk neighborhoods have been hired as lay health educators and health navigators.

## APPENDIX E: THEORETICAL FRAMEWORKS

## **Critical Race Theory:**

Critical Race Theory (CRT) is an academic concept created in the mid-1970s by Harvard Law School Professor Derrick Bell and refined by other legal scholars including Kimberlé Crenshaw, who coined the term. <sup>66</sup> In emphasizing race as a social construct rather than a biological reality, CRT critiques how race construction and institutionalized racism perpetuate a racial caste system in which people of color remain lowest in the hierarchy. <sup>67</sup> In 1994, the scholar Roy L. Brooks explained that CRT "focuses on the various ways in which the received tradition in law adversely affects people of color not as individuals but as a group. Thus, CRT attempts to analyze law and legal traditions through the history, contemporary experiences, and racial sensibilities of racial minorities in this country. The question always lurking in the background of CRT is this: What would the legal landscape look like today if people of color were the decision-makers?" <sup>68</sup>

Because the legacy of racism is regarded as deeply entrenched in societal systems and institutions, CRT argues for a radical transformation of current systems to eradicate, not simply acknowledge, racism.<sup>69</sup> Specifically, as described by Graham et al. (2011), the three primary objectives of CRT include: 1) to present stories about discrimination from the perspective of people of color; 2) to espouse the eradication of racial subjugation while acknowledging race as a social construct; and 3) to address matters affecting other social categories, such as sexuality and class.<sup>70</sup> The core tenets of CRT that can be applied to population health research include a) dominant cultural orientation

discrimination; b) race and ethnic relations approaches; c) narrative as inquiry; d) contextual and historicized analysis; and e) investigator relationship to research and the scholarly voice.<sup>71</sup> According to Ford and Airhihenbuwa, CRT serves two main purposes in health equity research: To provide an anti-racism lexicon that is the foundation of health equity discourse and to inform public health practices such as interventions or methodology.<sup>72</sup>

#### **Public Health Critical Race Praxis:**

As noted by Ford and Airhihenbuwa (2018), the benefits of CRT in public health research can only be realized if CRT is translated appropriately for this context. Therefore, several public health critical race theorists have developed semi-structured tools to facilitate this process. One such tool, created by the same authors, is the Public Health Critical Race Praxis (PHCRP). Introduced in 2010, the PHCRP is a "semi-structured process for conducting research that remains attentive to issues of both racial equity and methodological rigor. As praxis (i.e., an iterative methodology), it combines theory, experiential knowledge, science, and action to actively counter inequities." Central to the PHCRP is the need for researchers to evaluate their position relative to the subjects of their research. The authors describe four main phases, or focuses, of the PHCR research process (Figure 1):

- Focus 1: Contemporary Patterns of Racial Relations (Describe key characteristics of societal racialization for the study's time period);
- Focus 2: Knowledge Production (Identify disciplinary norms or other considerations that may inadvertently bias understandings derived from the research);
- Focus 3: Conceptualization and Measurement (Decide how to operationalize key concepts while accounting for the implications raised in Focus 2); and
- Focus 4: Action (Use knowledge gained to determine whether actions can be taken to help counter racial inequities).

Furthermore, per the PHCRP process, each focus draws from one or more affiliated principles that guide the research into achieving the focus's purpose. Drawing from CRT, the 10 principles of the PHCR include 1) race consciousness, 2) primacy of racialization, 3) race as social construct, 4) ordinariness of racism, 5) structural determinism, 6) social construction of knowledge, 7) critical approaches, 8) intersectionality, 9) disciplinary

self-critique, and 10) voice. According to the authors, PHCR advances the goals of public health by a) improving the conceptualization and measurement of racism on health, b) promoting disciplinary awareness of how the field's conventions may unintentionally reinforce inequities, and c) highlighting the important contributions that racial and ethnic minorities bring to health equity research.<sup>75</sup>

## **Biopsychosocial Impact of Racism:**

An abundance of research has already documented the deleterious effects of stress on various health-related outcomes. Only recently, however, have studies begun to examine perceived racism as a significant biopsychosocial stressor contributing to poorer outcomes in minoritized racial and ethnic groups. As noted by Kaholokula et al., racism "is a chronic social stressor defined as the beliefs, acts, and institutional measures that devalue people because of their phenotype or racial and ethnic affiliation." Individual and institutional racism directly affects health in numerous ways, including by limiting socioeconomic opportunities and mobility, subjecting minorities to racial bias in medical care, and increasing psychological burden associated with stigma and perceived inferiority.

The biopsychosocial effects of racism have been characterized throughout the United States on numerous racial and ethnic groups. For example, in African Americans, racism is related to more bodily pain in older men, lower heat pain tolerance in patients with osteoarthritis, and increased lower back pain in African Americans generally. Racism has also been associated with increased pain intensity and depressive symptoms in African-American women with osteoarthritis.78 In Asian Americans, racism has been linked with chronic health conditions and indicators of heart disease, pain, and respiratory disease.<sup>79</sup> Furthermore, in indigenous U.S. populations such as Native Hawaiians, the experience of racism has been associated with increased psychological distress mediated through passive, maladaptive coping mechanisms.80 Research suggests that race-related stress can be a more powerful risk factor of psychological distress in minoritized populations than stressful life events. However, such distress can also be minimized or inhibited by introducing cultural (racial pride, religiosity), social (family adaptability and cohesion), and psychological (optimism, ego resilience) resources.81 A biopsychosocial approach to racism should thus be adopted by counseling psychologists and health care practitioners to inform more effective prevention and intervention methods related to addressing health inequities.

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